

## ABSTRACT

A method of measuring polarization mode dispersion of an optical fiber includes inputting linearly polarized pulse light into an optical fiber, separating the input linearly polarized light from backscattered light from the optical fiber, detecting a light intensity  
5 of the backscattered light as time series data since the generation of the pulse light, calculating a fluctuation of the detected light intensity in the time series data, and evaluating polarization mode dispersion in the optical fiber, based on the calculated fluctuation value.